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**Calatayud**

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(54) **CAPACITIVE PROXIMITY SENSOR CONFIGURATION INCLUDING A SPEAKER GRILLE**

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| ***G06F 3/03*** | (2006.01) |

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(58) **Field of Classification Search**

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See application file for complete search history.

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(57) **ABSTRACT**

Embodiments of a capacitive sensor configuration for proximity detection by a playback device are provided. The playback device may include a capacitive proximity sensor configured to detect physical movement in a first direction, and a speaker grille on a surface of the playback device oriented at a relative angle to the capacitive proximity sensor. The capacitive proximity sensor includes a first metal electrode coupled to the speaker grille such that the capacitive proximity sensor may be further configured to detect physical movement in a second direction that is substantially at the relative angle to the first direction. The playback device may be configured to determine based on a detection of physical movement by the capacitive proximity sensor, a physical approach of an entity towards the playback device from one or more of the first direction and the second direction.

**20 Claims, 12 Drawing Sheets**